

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NEW JERSEY ADMINISTRATIVE CODE  
TITLE 7, CHAPTER 27  
SUBCHAPTER 30**

**CLEAN AIR INTERSTATE RULE (CAIR) NO<sub>x</sub> TRADING PROGRAM**

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### **REGULATORY HISTORY**

Adopted: June 19, 2007  
Effective: July 16, 2007  
Operative: August 17, 2007  
See: 39 N.J.R. 2637(a)

### **7:27-30.1 Purpose and scope**

- (a) This subchapter establishes New Jersey's NO<sub>x</sub> allocation for the Federal Clean Air Interstate Rule (CAIR) cap and trade program starting in 2009 pursuant 40 CFR Part 97 Subpart EE Appendix A and 40 CFR Part 97 Subpart EEEE Appendix A. The annual NO<sub>x</sub> CAIR cap and trade program covers from January 1 to December 31 of each year. The ozone season NO<sub>x</sub> CAIR cap and trade program covers from May 1 to September 30 of each year and replaces the NO<sub>x</sub> Budget Program. This subchapter also describes the allocation of the compliance supplement pool and the additional reporting requirement for output based data related to NO<sub>x</sub>.
- (b) This subchapter satisfies the requirements of an abbreviated SIP pursuant 40 CFR Part 97 for the CAIR Federal Implementation Plan (FIP). This subchapter addresses only the allocation of the annual and ozone season NO<sub>x</sub> allowances and the compliance supplement pool.

### **7:27-30.2 Definitions**

The following words and terms used have the following meanings, unless the context clearly indicates otherwise:

**“Alternate CAIR designated representative”** means the person who is authorized by the owners and operators of the unit, in accordance to 40 CFR Part 97 Subpart AA through Subpart HH for the CAIR NO<sub>x</sub> Annual Trading Program and 40 CFR Part 97 Subpart AAAA through Subpart HHHH for the CAIR NO<sub>x</sub> Ozone Season Trading Program, to act on behalf of the CAIR designated representative in matters pertaining to the trading programs.

**“Base emission budget”** means the CAIR NO<sub>x</sub> annual State budget and the CAIR NO<sub>x</sub> ozone season State budget minus the New Source/Growth Reserve and the Incentive Reserve.

**“CAIR”** means the Federal Clean Air Interstate Rules at 40 CFR Part 97.

**“CAIR designated representative”** means the person who is authorized by the owners and operators of the unit, in accordance to 40 CFR Part 97 Subpart AA through Subpart HH for the CAIR NO<sub>x</sub> Annual Trading Program and 40 CFR Part 97 Subpart AAAA through Subpart HHHH for the CAIR NO<sub>x</sub> Ozone Season Trading Program, to represent and legally bind each owner and operator in matters pertaining to the trading programs.

**“CAIR NO<sub>x</sub> allocation rate”** means the emission rate on which the emissions caps of the Federal CAIR program are based. For vintage years 2009 through 2014, the allocation rate is 0.15 pounds per MMBtu. For vintage years 2015 and thereafter, the allocation rate is 0.125 pounds per MMBtu.

**“CAIR NO<sub>x</sub> annual allowance”** means a tradable allowance that represents the limited authorization to emit one ton of NO<sub>x</sub> during an annual control period pursuant 40 CFR Part 97 Subpart AA through Subpart HH. CAIR NO<sub>x</sub> annual allowances can be used only in the CAIR NO<sub>x</sub> Annual Trading Program.

**“CAIR NO<sub>x</sub> annual State budget”** means the 12,670 CAIR NO<sub>x</sub> annual allowances for years 2009 through 2014 and the 10,558 CAIR NO<sub>x</sub> annual allowances for years 2015 and thereafter given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EE to be allocated to CAIR units.

**“CAIR NO<sub>x</sub> Annual Tracking System”** means the system by which the USEPA records allocations, deductions, and transfers of CAIR NO<sub>x</sub> annual allowances under the CAIR NO<sub>x</sub> Annual Trading Program.

**“CAIR NO<sub>x</sub> Annual Trading Program”** means an annual multi-state oxides of nitrogen air pollution control and emissions reduction program established by the USEPA in accordance with 40 CFR Part 97 Subpart AA through Subpart HH.

**“CAIR NO<sub>x</sub> annual unit”** means a unit that generates electricity and that is subject to the CAIR NO<sub>x</sub> Annual Trading Program pursuant 40 CFR Part 97 Subpart AA through Subpart HH.

**“CAIR NO<sub>x</sub> ozone season allowance”** means a tradable allowance which represents the limited authorization to emit one ton of NO<sub>x</sub> during an ozone season control period pursuant 40 CFR Part 97 Subpart AAAA through Subpart HHHH. CAIR NO<sub>x</sub> ozone season allowance can only be used in the CAIR NO<sub>x</sub> Ozone Season Trading Program.

**“CAIR NO<sub>x</sub> ozone season State budget”** means the 6,654 CAIR NO<sub>x</sub> ozone season allowances for years 2009 through 2014 and the 5,545 CAIR NO<sub>x</sub> ozone season allowances for years 2015 and thereafter given annually to New Jersey by the USEPA pursuant 40 CFR Part 97 Subpart EEEE to be allocated to CAIR units.

**“CAIR NO<sub>x</sub> Ozone Season Tracking System”** means the system by which the USEPA records allocations, deductions, and transfers of CAIR NO<sub>x</sub> ozone season allowances under the CAIR NO<sub>x</sub> Ozone Season Trading Program.

**“CAIR NO<sub>x</sub> Ozone Season Trading Program”** means a multi-state oxides of nitrogen air pollution control and emissions reduction program for the ozone season established by the USEPA in accordance with 40 CFR Part 97 Subpart AAAA through Subpart HHHH.

**“CAIR NO<sub>x</sub> ozone season unit”** means a unit that is subject to the CAIR NO<sub>x</sub> Ozone Season Trading Program pursuant 40 CFR Part 97 Subpart AAAA through Subpart HHHH.

**“CAIR unit”** means a CAIR NO<sub>x</sub> annual unit for the annual trading program and a CAIR NO<sub>x</sub> ozone season unit for the ozone season trading program.

**“Control period”** means, for the CAIR NO<sub>x</sub> Annual Trading Program, the period beginning January 1 of a calendar and ending on December 31 of the same year, inclusive. For the CAIR NO<sub>x</sub> Ozone Season Trading Program, the period beginning May 1 of a calendar and ending on September 30 of the same year, inclusive.

**“Department”** means the New Jersey Department of Environmental Protection.

**“Hazardous air pollutant”** means an air contaminant listed in or pursuant to 42 U.S.C. §7412(b).

**“Incentive reserve”** means the allowances set aside so that they are available for distribution after the control period to persons who claim incentive allowances, based on their saving or generation of electricity through the implementation of certain environmentally beneficial techniques.

**“MMBtu”** means one million British Thermal Units.

**“MWh”** means megawatt-hour.

**“Net electrical output”** means the amount of gross electrical output less the electrical energy consumed at the generating station(s) for station service or auxiliaries consumed during the time the plant was operating (such as net busbar energy leaving the plant). Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross electrical output.

**“Net useful heat output”** means one-half of the useful thermal output not associated with either the energy requirements for auxiliaries and emission controls or the net electric output performed by the steam generated; that is, one-half of the heat output associated with the steam delivered to an industrial process.

**“New source/growth reserve”** means the allowances set aside so that they are available for distribution to new CAIR units. Remaining allowances would be held for CAIR units that have lower NO<sub>x</sub> emission rates than the CAIR NO<sub>x</sub> allocation rates. These allowances, if any, would be available for distribution to any of these low NO<sub>x</sub> emission rate units that emit more tons of NO<sub>x</sub> than the number of allowances allocated to the units for the control period.

**“New unit”** means a unit:

1. For which an operating permit has been issued; and
2. For the years 2009 through 2011, that did not operate prior to 2009 and does not have three full control periods worth of data to be used for allocation calculation, and for years 2012 and thereafter, that has not commenced operation.

**“Output allocation rate”** means CAIR NO<sub>x</sub> allocation rate converted to an output basis by multiplying it by 10 MMBtu per MWh, which is the average heat rate expressed in MMBtu per MWh corresponding to a baseline gross electrical generating efficiency of 32 percent. For vintage years 2009 through 2014, the output allocation rate is 1.5 pounds per MWh. For vintage years 2015 and thereafter, the allocation rate is 1.25 pounds per MWh.

**“Ozone season”** means the period beginning May 1 of a calendar and ending on September 30 of the same year, inclusive.

**“Shut down”** means to discontinue use of a process, piece of equipment, control apparatus, or a source operation.

**“Unit”** means a large stationary combustion unit. For the NO<sub>x</sub> Budget Program, unit includes electric generating units, co-generation units, industrial boilers, and process heaters. For the CAIR NO<sub>x</sub> Trading Program, unit includes electric generating units and co-generation units.

“USEPA” means the United States Environmental Protection Agency.

“Vintage” means the first year that an allowance can be used.

### **7:27-30.3 Allocation of CAIR NO<sub>x</sub> annual allowances and CAIR NO<sub>x</sub> ozone season allowances**

- (a) For control periods in years 2009, 2010, and 2011, the Department shall calculate the allocations based on data from years 2003, 2004, and 2005. The Department shall submit the allocations for control periods in years 2009, 2010, and 2011 to the USEPA by April 30, 2007.
- (b) For control periods in years 2012 and thereafter, the calculation of the allocation shall be based on data from the control period of the three most recent years prior to the year the allocation is due to the USEPA. The allocations for the control periods beginning in 2012 are due to the USEPA by October 31, 2008 and October 31 of each year thereafter for the fourth year after the year of the notification deadline. For example, the allocation for control periods in 2012, which is due in 2008, shall be based on data from 2005 through 2007, and the allocation for control periods in 2013, which is due in 2009, shall be based on data from 2006 through 2008.
- (c) Pre-Control Period Allocations: There are two separate control periods for each year, annual (January 1 through December 31) and ozone season (May 1 through September 30). The allowances in the CAIR NO<sub>x</sub> annual State budget and the CAIR NO<sub>x</sub> ozone season State budget shall be allocated in accordance with the following steps:
  - 1. Step 1: Allocation to the New Source/Growth Reserve. The priority of this reserve is to hold aside allowances so that they are available for distribution to new CAIR units. Remaining allowances would be held for CAIR units that have lower NO<sub>x</sub> emission rates than the CAIR NO<sub>x</sub> allocation rates. These allowances, if any, would be available for distribution to any of these low NO<sub>x</sub> emission rate units that emit more tons of NO<sub>x</sub> than the number of allowances allocated to the units for the control period.
    - i. Any unallocated New Source/Growth Reserve allowances from the NO<sub>x</sub> Budget Program for the 2008 control period shall be carried over for use in the 2009 CAIR NO<sub>x</sub> ozone season.
    - ii. The Department shall allocate 1,267 CAIR NO<sub>x</sub> annual allowances and 665 CAIR NO<sub>x</sub> ozone season allowances of the State budgets each year into this reserve for vintage years 2009 through 2014.
    - iii. For vintage years 2015 and thereafter, the Department shall allocate 1,056 CAIR NO<sub>x</sub> annual allowances and 555 CAIR NO<sub>x</sub> ozone season allowances of the State budgets each year into this reserve.
  - 2. Step 2: Allocation to the Incentive Reserve. The purpose of this reserve is to hold aside allowances so that they are available for distribution after the control period to persons who claim incentive allowances, based on their saving or generation of electricity

through the implementation of certain environmentally beneficial techniques pursuant N.J.A.C. 7:27-30.5.

- i. Any unallocated Incentive Reserve allowances from the NO<sub>x</sub> Budget Program for the 2008 control period shall be carried over for use in the 2009 CAIR NO<sub>x</sub> ozone season.
  - ii. The Department shall allocate 634 CAIR NO<sub>x</sub> annual allowances and 333 CAIR NO<sub>x</sub> ozone season allowances of the State budgets each year into this reserve for vintage years 2009 through 2014.
  - iii. For vintage years 2015 and thereafter, the Department shall allocate 528 CAIR NO<sub>x</sub> annual allowances and 277 CAIR NO<sub>x</sub> ozone season allowances of the State budgets each year into this reserve.
3. Step 3: Except as set forth in (g) below, this step is a determination of the number of allowances which are to be allocated in (c)4 (Step 4) to each CAIR unit that is not a new CAIR unit. In this step, the Department shall determine the number of allowances to be allocated to each CAIR unit that is not a new CAIR unit, in accordance with the following procedure:
- i. Calculate the average NO<sub>x</sub> emission rate (ER<sub>NOx</sub>) of the unit, expressed in pounds per MWh, in accordance with the following equation:

Equation 1

$$ER_{NOx} = \frac{E_1 + E_2}{NEO_1 + NEO_2}$$

Where:

- $E_1$  = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;
- $E_2$  = The total actual NO<sub>x</sub> emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;
- $NEO_1$  = The net electrical output, MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;
- $NEO_2$  = The net electrical output, MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output; and
- ii. The number of allowances to be allocated to the unit is determined in accordance with the following procedure:

- (1) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the unit as calculated in (c)3i above is greater than output allocation rate, then the number of allowances for the units shall be determined in accordance with the following equation:

Equation 2

$$\text{Allowances} = \frac{\text{AR} \times \left( \frac{\text{NEO}_1 + \text{NEO}_2}{2} \right) + (\text{AR} \times 0.293) \times \left( \frac{\text{NUHO}_1 + \text{NUHO}_2}{2} \right)}{2,000}$$

Where:

- AR = The output allocation rate;
- NEO<sub>1</sub> = The net electrical output, expressed in MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;
- NEO<sub>2</sub> = The net electrical output, expressed in MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;
- 0.293 = The conversion factor from MMBtu to MWh;
- NUHO<sub>1</sub> = The net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;
- NUHO<sub>2</sub> = The net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;
- 2,000 = The factor for converting pounds into tons; and

- (2) If the average NO<sub>x</sub> emission rate (ER<sub>NO<sub>x</sub></sub>) of the unit as calculated in (c)3i above is less than or equal to output allocation rate, then the number of allowances for the units shall be determined in accordance with the following equations:

Equation 3

$$\text{Allowances} = \frac{\text{E}_{\text{Allowable}} + \text{E}_{\text{Actual}}}{2}$$



Where:

$E_{\text{Allowable}}$  = The average allowable emissions for the unit, as determined in Equation 4;

$E_{\text{Actual}}$  = The average actual emissions for the unit, as determined in Equation 5;  
and

Equation 4

$$E_{\text{Allowable}} = \sum_{i=1}^n \left\{ (AER_i \times 10) \times \left[ \left( \frac{NEO_{1i} + NEO_{2i}}{2} \right) + \left( \frac{NUHO_{1i} + NUHO_{2i}}{2} \times 0.293 \right) \right] \right\} \times \frac{1}{2,000}$$

Where:

$n$  = The number of types of fuel burned during the two greatest net electrical output control periods during the most recent three years;

$AER_i$  = The lesser of the CAIR  $NO_x$  allocation rate or the lowest allowable emission rate expressed in pounds per MMBtu for the unit for each type of fuel burned during the two greatest net electrical output control periods during the most recent three years;

$10$  = The average heat rate expressed in MMBtu per MWh corresponding to a baseline gross electrical generating efficiency of 32 percent. Most existing electric utility steam generating units achieve an overall efficiency of 29 to 38 percent. The output-based emission limit was, therefore, is calculated by multiplying the input-based emission limit by the heat rate corresponding to a 32 percent gross electrical generating efficiency;

$NEO_{1i}$  = For the specified fuel, the net electrical output, expressed in MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;

$NEO_{2i}$  = For the specified fuel, the net electrical output, expressed in MWh, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;

$NUHO_{1i}$  = For the specified fuel, the net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net useful heat output;

$NUHO_{2i}$  = For the specified fuel, the net useful heat output, expressed in MMBtu, during the following control period: of the most recent three control

periods, the control period during which the unit had the second greatest actual net useful heat output;

0.293 = The conversion factor from MMBtu to MWh;

2,000 = The factor for converting pounds into tons; and

Equation 5

$$E_{\text{Actual}} = \frac{E_1 + E_2}{2} \times \frac{1}{2,000}$$

Where:

$E_1$  = The total actual  $\text{NO}_x$  emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the unit had the greatest actual net electrical output;

$E_2$  = The total actual  $\text{NO}_x$  emissions, expressed in pounds, during the following control period: of the most recent three control periods, the control period during which the unit had the second greatest actual net electrical output;

2,000 = The factor for converting pounds into tons; and

4. Step 4: The Department shall allocate the remainder of the allowances as follows:

i. The sum of the following shall be determined:

- (1) The number of allowances allocated to the New Source/Growth Reserve in (c)1 (Step 1) above;
- (2) The number of allowances allocated to the Incentive Reserve in (c)2 (Step 2) above;
- (3) The number of allowances determined in (c)3 (Step 3) above to be allocated to each CAIR unit that is not a new CAIR unit;

ii. If the sum in (c)4i above is less than or equal to the CAIR  $\text{NO}_x$  annual State budget or the CAIR  $\text{NO}_x$  ozone season State budget, then the Department shall allocate allowances as follows:

- (1) Allowances shall be allocated to each CAIR unit that is not a new CAIR unit, as determined in (c)3 (Step 3) above;
- (2) Any remaining allowances that were not allocated in (c)1 (Step 1) above shall be carried over to the next control period's New Source/Growth Reserve;

- (3) Any remaining allowances that were not allocated in (c)2 (Step 2) above shall be carried over to the next control period's Incentive Reserve; and
- iii. If the sum determined in (c)4i above is greater than the State budget for the control period, then the Department shall allocate the allowances to CAIR units in proportion to the amount of the determined in (c)3 (Step 3) above. The proportional share to be allocated to each shall be determined as follows:

Equation 6

$$\text{Allowances} = (\text{Budget}_{\text{NJ}} - A_1 - A_2) \times \frac{PA}{PA_{\text{Total}}}$$

Where:

- Budget<sub>NJ</sub> = The CAIR NO<sub>x</sub> annual State budget for the annual control period or the CAIR NO<sub>x</sub> ozone season State budget for the ozone season control period;
- A<sub>1</sub> = The total number of allowances allocated to the New Source/Growth Reserve in (c)1 (Step 1) above;
- A<sub>2</sub> = The total number of allowances allocated to the Incentive Reserve in (c)2 (Step 2) above;
- PA = The number of allowances determined for allocation to the unit as determined in (c)3 (Step 3) above; and
- PA<sub>Total</sub> = The sum of the allowances determined for allocation to all CAIR units under (c)3 (Step 3) above.

- (d) Post-Control Period: The Department shall allocate allowances from the New Source/Growth Reserve and Incentive Reserve by submitting allocation information to the USEPA as follows:
  - 1. The Department shall determine the number of allowances to be allocated from the New Source/Growth Reserve as follows:
    - i. For any new CAIR unit, the Department shall determine the number of allowances to be allocated to each new unit from the New Source/Growth Reserve. This number shall equal the projected number of tons of NO<sub>x</sub> to be emitted by the unit during the control period pursuant N.J.A.C. 7:27-30.6(c), unless the emission rate exceeds the lesser of the CAIR NO<sub>x</sub> allocation rate or the lowest allowable emissions limit during the control period, in which case the allowances allocated to the unit will be reduced by the difference between the projected NO<sub>x</sub> emissions and the emissions at the lesser of the CAIR NO<sub>x</sub> allocation rate or the allowable emission rate during the period in which the unit exceeded this condition within the control period;

- ii. For any CAIR unit eligible to receive growth allowances, if the unit's NO<sub>x</sub> emissions in tons during the past control period was greater than the number of allowances allocated to the unit for that control period, then the Department shall determine the number of allowances to be allocated to the unit from the New Source/Growth Reserve. The CAIR units that are eligible are units that emitted NO<sub>x</sub> at a rate less than or equal to the output allocation rate, except that no new unit is eligible. The number of allowances shall be determined in accordance to the following procedure:

- (1) Calculate the average actual emission rate (ER<sub>Actual</sub>) of the unit for the current control periods in accordance with the following equation:

Equation 7

$$ER_{Actual} = \frac{E_{Actual}}{NEO_{Actual}}$$

Where:

E<sub>Actual</sub> = Actual emissions during the control period, expressed in pounds of NO<sub>x</sub>; and

NEO<sub>Actual</sub> = Actual net electrical output during the control period, expressed in MWh;

- (2) If the average actual emission rate (ER<sub>Actual</sub>) for the CAIR unit as calculated in accordance with (d)1ii(1) above is greater than the output allocation rate, then the Department shall allocate no allowances from the New Source/Growth Reserve to the CAIR unit;
- (3) If the average actual emission rate (ER<sub>Actual</sub>) for the CAIR unit as calculated in accordance with (d)1ii(1) above is not greater than the output allocation rate, and if the actual emissions during the control period is greater than the number of allowances allocated to the unit pursuant to (c)4ii(1) or (c)4iii above, then the Department shall determine the number of allowances from the New Source/Growth Reserve to the CAIR unit to be allocated in accordance with the following equation:

Equation 8

$$A_{Unit} = E_{Actual} - A$$

Where:

E<sub>Actual</sub> = The total NO<sub>x</sub> emissions, expressed in tons, of the unit during the control period, minus any emissions due to the exceedance of an applicable maximum allowable emissions limit; and

- A = The number of allowances that had been allocated to the unit pursuant to (c)4ii(1) or (c)4iii above;
2. The Department shall allocate allowances from the New Source/Growth Reserve for new units as follows:
- i. For the CAIR NO<sub>x</sub> Annual Trading Program, allocate to new units by October 31 of the control period;
  - ii. For the CAIR NO<sub>x</sub> Ozone Season Trading Program, allocate to new units by July 31 of the control period;
  - iii. If the sum of all allowances determined to be allocated for new units from the New Source/Growth Reserve under (d)1i above is less than or equal to the number of allowances contained in the reserve, then the Department shall allocate the number of allowances to each new unit equal to the number of allowances determined to be allocated to that new unit;
  - iv. If there are allowances left in the New Source/Growth Reserve after distributing the allowances in accordance with (d)2iii above, then the Department shall allocate the remaining allowances in accordance with (d)3 below;
  - v. If the sum of allowances determined in accordance with (d)1i above to be allocated to new units from the New Source/Growth Reserve is greater than the number of allowances contained in the reserve, then the Department shall allocate all the allowances in the reserve, and each new unit shall receive a number of allowances equal to its prorated share determined in accordance with the following equation:

Equation 9

$$\text{Allowances}_N = \frac{A_{\text{Unit}}}{A_{\text{Total}}} \times A_{\text{Reserve}}$$

Where:

- A<sub>Unit</sub> = The number of allowances determined to be allocated to the new unit, as determined in (d)1i above;
- A<sub>Total</sub> = The total number of allowances determined to be allocated to all new units, as determined in (d)1i above; and
- A<sub>Reserve</sub> = The number of allowances in the New Source/Growth Reserve;
3. The Department shall allocate allowances from the New Source/Growth Reserve for growth as follows:

- i. For the CAIR NO<sub>x</sub> Annual Trading Program and the CAIR NO<sub>x</sub> Ozone Season Trading Program, allocate for the purpose of growth by March 1 of the year following the control period;
- ii. If the sum of all allowances determined to be allocated for growth from the New Source/Growth Reserve under (d)1ii above is less than or equal to the number of allowances left in the reserve after allocating to new units in accordance with (d)2 above, then the Department shall allocate the number of allowances to each unit for growth equal to the number of allowances determined to be allocated to that unit;
- iii. If there are allowances left in the New Source/Growth Reserve after distributing the allowances in accordance with (d)3ii above, then the Department shall allocate the remaining allowances in accordance with (d)5 below;
- iv. If the sum of allowances determined in accordance with (d)1ii above to be allocated growth from the New Source/Growth Reserve is greater than the number of allowances left in the reserve after allocating to new units in accordance with (d)2 above, then the Department shall allocate all the allowances in the reserve, and each unit shall receive a number of growth allowances equal to its prorated share determined in accordance with the following equation:

Equation 10

$$\text{Allowances}_G = \frac{A_{\text{Unit}}}{A_{\text{Total}}} \times A'_{\text{Reserve}}$$

Where:

$A_{\text{Unit}}$  = The number of allowances determined to be allocated to the unit for growth, as determined in (d)1ii above;

$A_{\text{Total}}$  = The total number of allowances determined to be allocated to all units for growth, as determined in (d)1ii above; and

$A'_{\text{Reserve}}$  = The number of allowances left in the New Source/Growth Reserve after allocating to new units in accordance with (d)2 above;

4. The Department shall allocate the allowances from the Incentive Reserve for the implementation of environmentally beneficial techniques which save or generate energy as follows:
  - i. The Department shall determine the number of allowances to be allocated to each claimant who submitted a claim for the incentive allowances within 30 days after the current control periods. After the claim has been received and approved by the Department pursuant to N.J.A.C. 7:27-30.5, the number of incentive

allowances shall be determined in accordance with the following equation:

Equation 11

$$A_{Claim} = \frac{OAR}{2,000} \times Elec$$

Where:

OAR = The output allocation rate;

Elec = The amount of saved or generated electricity, expressed in MWh, in the approved claim for the specified control period; and

2,000 = The factor for converting pounds into tons;

- ii. If the sum of all allowances determined to be allocated to claimants from the Incentive Reserve under (d)4i above is less than or equal to the number of allowances in the reserve, then the Department shall allocate to each claimant, the number of allowances determined to be allocated to that claimant;
- iii. If there are allowances left in the Incentive Reserve after distributing the allowances in accordance with (d)4ii above, then the Department shall allocate such allowances in accordance with (d)5 below;
- iv. If the sum of all allowances determined to be allocated to claimants from the Incentive Reserve under (d)4i above is greater than the number of allowances in the reserve, then the Department shall allocate all allowances in the reserve and each claimant shall receive a number of allowances equal to its prorated share determined in accordance with the following equation:

Equation 12

$$Allowances_i = \frac{A_{Claim}}{A_{Total}} \times A_{Reserve}$$

Where:

$A_{Claim}$  = The number of allowances determined to be allocated to the claimant under (d)4i above;

$A_{Total}$  = The total number of allowances determined to be allocated to all claimants under (d)4i above;

$A_{Reserve}$  = The number of allowances in the Incentive Reserve;

5. If there are any allowances remaining in the New Source Reserve/Growth Reserve and/or the Incentive Reserve after allowances are allocated in accordance with (d)1 through 4 above, the Department shall allocate the remaining allowances in accordance with the following procedure:
  - i. If there are allowances remaining in the Incentive Reserve after the allowances are allocated in accordance with (d)4 above, and if the number of allowances in the New Source/Growth Reserve were less than the total number of allowances determined to be allocated under (d)1 above for the current control periods, then the Department shall allocate allowances remaining in the Incentive Reserve to the units being allocated from the New Source Reserve/Growth Reserve. The number of allowances to be allocated to each unit shall be proportional to the number that each unit was under-allocated, relative to the number of determined allowances under (d)1 above, until the remaining allowances in the Incentive Reserve have all been allocated or until each unit is no longer under-allocated, whichever comes first. Any remaining allowances left in the Incentive Reserve after this procedure takes place shall be allocated pursuant to (d)5iii below.
  - ii. If there are allowances remaining in the New Source Reserve/Growth Reserve after the allowances are allocated in accordance with (d)3 above, and if the number of allowances in the Incentive Reserve were less than the total number of allowances determined to be allocated to claimants under (d)4 above for the current control periods, then the Department shall allocate allowances remaining in the New Source Reserve/Growth Reserve to the claimants begin allocated allowances from the Incentive Reserve. The number of allowances to be allocated to each claimant shall be proportional to the number of allowances that each claimant was under-allocated, relative to the number determined to be allocated to the claimant under (d)4 above, until the remaining allowances in the New Source Reserve/Growth Reserve have all been allocated or until each claimant is no longer under-allocated, whichever comes first. Any remaining allowances left in the New Source Reserve/Growth Reserve after this procedure takes place shall be allocated pursuant to (d)5iii below.
  - iii. The Department shall allocate any allowances remaining in the two reserves as follows:
    - (1) If the sum determined at (c)4i above is greater than New Jersey's State budgets under CAIR for a specified control period, then the Department shall allocate allowances remaining in the reserves to CAIR units. The number of allowances to be allocated to each CAIR unit shall be proportional to the number that each unit was under-allocated, relative to the number determined to be allocated to the unit under (c)3 above, until the remaining allowances in the reserves have all been allocated or until each unit is no longer under-allocated, whichever comes first. Any remaining allowances left in the reserves after this procedure takes place shall be allocated pursuant to (d)5iii(2) below; and



- (2) Any allowances remaining in the reserves that have not been allocated under (d)5iii(1) above shall remain in the Incentive Reserve or the New Source Reserve/Growth Reserve to be available for allocation in the following year.
- (e) In the computations at (c) and (d) above to determine the number of whole allowances to be allocated, individual quantities of allowances with the highest decimals shall be rounded up and the remaining quantities of allowances with lower decimals shall be rounded down, such that the total amount of allowances allocated under the provision equals the total number of allowances available.
- (f) For the purpose of calculating the allocations pursuant to this section and N.J.A.C. 7:27-30.5, the Department shall consider other available data, such as stack testing at the facility or emissions estimates based on the amount of fuel the unit used for any year for which the Department has deemed the data unusable because equipment malfunction. In such a case, the Department will notify the CAIR NO<sub>x</sub> designated representative or the alternate CAIR NO<sub>x</sub> designated representative.
- (g) Notwithstanding the provisions of (c) and (d) above, the Department shall not allocate any allowances to a CAIR unit that is no longer in operation at the time that allowances are being allocated.
- (h) The Department shall notify the authorized account representative prior to the recordation of the unit's allowance allocation by the USEPA in accordance with 40 CFR 97.153 and 97.353, if the Department determines that the Department has erroneously allocated too many or too few allowances to an account, or, in allocating allowances, the Department relied upon data that it determines are inaccurate.
  - 1. If too many allowances were allocated, then the Department shall determine the correct number of allowances and submit corrected allocations under (c) or (d) above before the USEPA records the erroneous allocations.
  - 2. If too few allowances were allocated, then the Department shall determine the correct number of allowances and submit corrected allocations under (c) or (d) above before the USEPA records the erroneous allocations.

#### **7:27-30.4 The compliance supplement pool**

Notwithstanding the provisions of 40 CFR 97.143, none of the CAIR NO<sub>x</sub> allowances listed for New Jersey in the table in 40 CFR 97.143(a) shall be allocated.

#### **7:27-30.5 Claims for incentive allowances**

- (a) In order to provide an incentive for the saving or generation of electricity through the implementation of certain environmentally beneficial techniques, pursuant to N.J.A.C. 7:27-30.3(d)3, the Department shall allocate allowances each year to persons who have demonstrated,

in accordance with this section, that they have saved or generated electricity through such techniques.

- (b) Allocation of allowances pursuant to N.J.A.C. 7:27-30.3(d)3 shall be based on claims submitted. No such incentive allowances shall be allocated for any claim that is not received by the Department within 30 days of the control period in which the electricity savings or generation occurred.
- (c) The following persons are eligible to submit a claim for incentive allowances:
  - 1. A New Jersey consumer of electricity who:
    - i. Purchases its electricity from an electricity supplier licensed in New Jersey; and
    - ii. Reduces its electricity consumption at a facility located in New Jersey through implementation of an energy efficiency measure, initiated in 1992 or thereafter, which:
      - (1) Belongs to a class to which the “New Jersey Clean Energy Program – Protocols to Measure Resource Savings (New Jersey Clean Energy Protocols),” issued by New Jersey’s Board of Public Utilities in September, 2004 ([http://www.state.nj.us/bpu/home/BO\\_CE.shtml](http://www.state.nj.us/bpu/home/BO_CE.shtml)), applies;
      - (2) Does not result in the construction, installation, or operation of a new emission unit or increase the emissions of any existing emission unit at the facility;
      - (3) Does not cause an increase in emissions of any hazardous air pollutant; and
      - (4) Does not cause an increase greater than five tons per year in the emissions of any air contaminant regulated under N.J.A.C. 7:27 or the Federal Clean Air Act, 42 U.S.C. §§ 7401 et seq., other than NO<sub>x</sub>.
  - 2. The owner or operator of equipment that is not a CAIR unit, that commenced operation in 1992 or thereafter, and that generates electricity through one of the following environmentally beneficial techniques:
    - i. Generation through the burning of landfill gas or digester gas;
    - ii. Generation by a fuel cell; or
    - iii. Generation by using solar energy or wind power.
  - 3. The owner or operator of equipment that generates electricity by another environmentally beneficial technique approved by the Department.

4. The New Jersey Board of Public Utilities, for the electricity saved or generated in environmentally beneficial techniques through the New Jersey's Clean Energy Program.
  - i. After the New Jersey Board of Public Utilities receives the incentive allowances from the Department, the New Jersey Board of Public Utilities will retire the allowances to benefit the environment.
  - ii. The sources covered by the New Jersey Board of Public Utilities' claim cannot separately claim incentive allowances.
- (d) Prior to filing a claim under this section, a person shall establish an account in the CAIR NO<sub>x</sub> Tracking System and/or the CAIR NO<sub>x</sub> Ozone Season Tracking System pursuant to CAIR.
- (e) A claim for incentive allowances shall include:
  1. Documentation indicating that the person submitting the claim is eligible to submit a claim for incentive allowances pursuant to (c) above;
  2. Identification of the control period (annual or ozone season) for which the claim is being made. A separate claim shall be submitted for each control period;
  3. The amount of electric generation or savings during the control period that is being claimed, expressed in MWh as calculated pursuant to (f) below;
  4. The calculations made to determine the amount of electricity generation or savings being claimed and a report of the data and the methods on which the calculations are based;
  5. The unique identification number assigned to the account held by the claimant in the CAIR NO<sub>x</sub> Tracking System and/or the CAIR NO<sub>x</sub> Ozone Season Tracking System; and
  6. Certification in accordance with N.J.A.C. 7:27-1.39.
- (f) The amount of electric generation or savings being claimed shall be determined as follows:
  1. For energy measures, the amount of electricity claimed to be saved shall be calculated pursuant to the guidance document: "New Jersey Clean Energy Program – Protocols to Measure Resource Savings (New Jersey Clean Energy Protocols)," issued by New Jersey's Board of Public Utilities in September, 2004 ([http://www.state.nj.us/bpu/home/BO\\_CE.shtml](http://www.state.nj.us/bpu/home/BO_CE.shtml)); and
  2. For energy generation using an environmentally beneficial technique listed in (c)2 or (c)3 above, if the technique entails the supplemental use of conventional fuels (such as oil, gas, or coal), the total amount of electricity generated shall not include any amount of electricity generated by the use of such fuels.

- (g) A claim shall be submitted to the Department at the following address within 30 days after the control period for which the claim is sought:

Attn: NJ CAIR Incentive Allowance Claim  
New Jersey Department of Environmental Protection  
Bureau of Air Quality Planning  
401 East State Street, 7<sup>th</sup> Floor  
P.O. Box 418  
Trenton, NJ 08625-0418

- (h) No incentive allowances shall be allocated unless the Department approves the claim. The Department shall disapprove of a claim if:
1. The claim was not received by the Department within 30 days of the control period for which the claim is sought;
  2. The claim does not include all the items required at (d) and (e) above;
  3. The amount of electricity claimed to have been generated or saved was calculated incorrectly;
  4. The person submitting the claim is not eligible as specified at (c) above; or
  5. The person submitting the claim did not establish an account in the CAIR NO<sub>x</sub> Tracking System and/or the CAIR NO<sub>x</sub> Ozone Season Tracking System pursuant to (d) above.
- (i) The Department will notify the claimant in writing whether the incentive claim has been approved or denied.

#### **7:27-30.6 Reporting requirements**

- (a) The owner or operator of a CAIR unit shall submit the following information on an electronic form available from the Department at [www.nj.gov/dep/baqp](http://www.nj.gov/dep/baqp):
1. Information identifying the CAIR unit and type of combustion unit;
  2. The rated fuel capacity of the unit, expressed in MMBtu per hour;
  3. Whether a restriction on heat input or hours of operation exists, and if so, how much fuel or how many hours, and the period of time for which the restriction applies;
  4. For each control period:
    - i. For each type of fuel burned, the heat input, expressed in MMBtu;
    - ii. For each type of fuel burned, the total actual NO<sub>x</sub> emission, expressed in pounds;

- iii. For each type of fuel burned, the net electrical output, expressed in MWh; and
  - iv. For each type of fuel burned at a co-generation unit, the net useful heat output, expressed in MMBtu;
  - v. For each type of fuel burned, the most stringent applicable allowable NO<sub>x</sub> emission rate, expressed in pounds per MMBtu;
  - vi. Any other information requested by the Department for allocating allowances pursuant to N.J.A.C. 7:27-30.3; and
  - vii. Certification pursuant to N.J.A.C. 7:27-1.39.
- (b) On or before March 1, 2007, the owner or operator of a CAIR unit shall submit to the Department the annual and the ozone season information specified in (a) above for calendar years 2003, 2004, and 2005. On or before July 1, 2007 and on or before July 1 of each year thereafter, the owner or operator of a CAIR unit shall submit the annual and the ozone season information specified in (a) above for the calendar year preceding the submission date. For example, the information for 2006 is due July 1, 2007.
- (c) In addition to the requirement of (a) above, the owner or operator of a new CAIR unit shall submit the following information on an electronic form available from the Department at [www.nj.gov/dep/baqp](http://www.nj.gov/dep/baqp):
- 1. By October 1 of the control period for the CAIR NO<sub>x</sub> Annual Trading Program:
    - i. Information identifying the CAIR unit;
    - ii. The total actual NO<sub>x</sub> emission from January 1 to August 31 of the current control period, expressed in pounds;
    - iii. A reasonable estimate of a projected total NO<sub>x</sub> emission from September 1 to December 31 of the current control period, expressed in pounds; and
    - iv. Certification pursuant to N.J.A.C. 7:27-1.39; and,
  - 2. By July 1 of the control period for the CAIR NO<sub>x</sub> Ozone Season Trading Program:
    - i. Information identifying the CAIR unit;
    - ii. The total actual NO<sub>x</sub> emission from May 1 to May 31 of the current control period, expressed in pounds;
    - iii. A reasonable estimate of a projected total NO<sub>x</sub> emission from June 1 to September 30 of the current control period, expressed in pounds; and

iv. Certification pursuant to N.J.A.C. 7:27-1.39.

- (d) The information requested in (a) through (c) above shall be submitted to the Department electronically on an electronic form supplied by the Department at [www.nj.gov/dep/baqp](http://www.nj.gov/dep/baqp). If it is a hardship for an owner or operator to submit the requested information electronically, the owner or operator may annually request approval from the Department to submit the information requested in (a) through (c) above on a paper form. The Department shall approve such a request provided that:

1. The request is certified by the responsible official in accordance with N.J.A.C. 7:27-1.39 and submitted to the Department no later than March 1 of the submittal year;
2. The owner or operator explains:
  - i. The hardship that electronic submittal would impose; and
  - ii. The steps the owner or operator will take to ensure the facility's ability to make electronic submittals in the future; and
3. The owner or operator agrees to take reasonable steps to become able to submit the form electronically in future years.

- (e) Information submitted to the Department in accordance with (a) through (d) above shall be emailed to [njdep-bapq@dep.state.nj.us](mailto:njdep-bapq@dep.state.nj.us), followed by a mailing containing a paper copy of the data and a properly signed certification pursuant to N.J.A.C. 7:27-1.39. The Department's mailing address is:

Attn: NJ CAIR Program  
New Jersey Department of Environmental Protection  
Bureau of Air Quality Planning  
401 East State Street, 7<sup>th</sup> Floor  
P.O. Box 418  
Trenton, NJ 08625-0418

- (f) After a CAIR unit permanently shuts down, the authorized account representative for the unit may obtain from the Department an exemption from the requirement pertaining to the unit at this section in accordance with the following procedure:

1. To obtain an exemption the authorized account representative shall submit a written request to the Department for exemption at the address:

Attn: NJ CAIR Program – Shut down  
New Jersey Department of Environmental Protection  
Bureau of Air Quality Planning  
401 East State Street, 7<sup>th</sup> Floor  
P.O. Box 418  
Trenton, NJ 08625-0418

2. A request for an exemption shall include identification of the CAIR unit and the date the CAIR unit shut down;
  3. Upon verification that the unit has been permanently shut down, the Department shall approve the request and shall send written approval of the exemption from the requirements of this section pertaining to the unit to the authorized account representative and the USEPA. The approval shall contain any conditions deemed necessary by the Department;
  4. If the Department verifies that the unit has not been permanently shut down, the Department shall deny the request and shall send written notification of such denial to the authorized account representative of the unit.
- (g) The owner or operator of a CAIR unit subject to this subchapter is responsible for ensuring compliance with all requirement of this section. An owner or operator who fails to submit the information required under this section shall be subject to civil administrative penalties in accordance with N.J.A.C. 7:27A-3. Compliance with the reporting requirements under this section does not relieve any owner or operator of a CAIR unit from the responsibility to comply with any other applicable reporting requirements set forth in any Federal or State law, rule, or regulation, or in the conditions of approval of any permit or certificate in effect.